Directions: Please complete shaded areas below.

Department Name: ETSD
Project Name: End of Life-Cycle Enterprise Production Server Replacement
Project Amount: $654,000
Preparer Name & Contact Information: Ryan Elliott

Project Type: Please check (√) one.

X	**Enterprise**	☐	**Communities of Interest**	☐	**Department Specific**

Funding Source: Please check (√) one.

X	**GF Capital**	☐	**Proprietary Capital**

☐ **Mandated Requirement**
(If checked (√), please indicate who is mandating this request as well as the time frame)

4 **Department Priority of Initiative (1, 2, 3, etc.)**

Section A

Background:
Provide any relevant background information to include existing investments in the proposed project. If applicable, please include any information explaining why this is a mandated project.

Replacement and acquisition of infrastructure to support Enterprise initiatives. Over the past eight to ten years ETSD has been deploying INTEL servers throughout the county in support of METRONET. The services that have been made available as a result of this include, e-mail, Blackberry Mobile Messaging, GIS access, Mainframe access from PC's, Internet/Intranet, DMZ/Firewalls, print/file servers, Web Statistics and Reporting Servers, access to user and departmental files and data and expanding County Web Services .Net infrastructure). All of these services depend on an infrastructure of INTEL servers. These servers provide the underlining connection and access required for delivery of services to County employees, Departments and Citizens. Also included in this request is the acquisition of a centralized infrastructure for Media Bin.

The infrastructure providing the Enterprise services listed above is extremely old and has reached its "end of lifecycle" and requires replacement.

Problem Statement:
Define the problem, need, or opportunity.

This request is for replacement of the INTEL servers that are used in the support of the METRONET environment. The existing infrastructure servers are old, "end of life" technology and are failing at an ever-increasing rate. To date, there has been no funding mechanism put in place to provide periodic replacement of these machines. Warranties run out, maintenance costs increase and system reliability suffers, causing service interruptions impacting users attempting to access applications and resources on METRONET. Many of the critical servers are old "black boxes" that were originally deployed at the inception of METRONET. These machines have older, slower CPU's and insufficient memory. Because of the physical and technological age of

the servers, the performance demands put on the infrastructure is exceeding its ability to adequately service the current workload and projected growth. This will result in slower application and data response times, ***when*** these units are operational.

More importantly, these "End of Life" infrastructure servers are experiencing equipment and component failures at an increasing rate. Failure of this infrastructure results in an impact to a myriad of METRONET users County-wide. Extended outages will occur, making mission critical services such as e-mail, scheduling of meetings, access to departmental and Enterprise data and applications (ERP, EDMS, EAMS, etc.) unavailable County-wide.

Acquisition of infrastructure is needed to provide a centralized location for Media bin, an application which centrally houses media images to include pictures, logos, power point presentations, video and audio files. Currently there is no centralized repository to access these files. This is needed to enhance Miamidade.Gov web presence.

Solution:
What is the proposed solution?

Replacement of the most critical and oldest, INTEL infrastructure servers with newer, more reliable, servers with sufficient memory and processing power to meet existing workloads. The proposal is only for the oldest machines and is not intended to replace all of them the first year. However, it is intended that a process be established to replace some of the infrastructure servers each year in a rotational basis (oldest first) each year.

Replace and acquire infrastructure for:

Enterprise Exchange Maintenance/Replacement	150,000
Systematic Replacement of Old Production Servers	120,000
.Net Infrastructure Servers	50,000
Enterprise Crystal Reports Server	165,000
Security Office - BlackBerry Enterprise Server	17,000
MediaBin Asset Server	82,000
Web Statistics Server	70,000

Expected Benefits / Direct Payback:
State the benefits of solving the problem or reaching the goal. Hints: "How the project will reduce costs (perhaps from reducing redundant tasks such as data entry), better decision making at each step of a process (perhaps due to more accurate and timely information), or improved efficiency (thanks to fewer steps to process a transaction).

Specify collective benefits and identify benefits that are specific to each stakeholder. Wherever there are metrics (numbers or targets) for improvement, be sure to include them. Examples: "Reduce communications costs by 20%" or "Increase revenues by $1,340,500 in fiscal year 2007.

Operational cost will be reduced. New machines carry a multi-year warranty and all of the units to be replaced are either under maintenance or are eligible for maintenance contracts, (black boxes). Reliability of the METRONET will be enhanced and failures that do occur will be more easily resolved and have less impact. Newer machines are much more powerful and in the case of a failed unit the workload will be shared among the remaining machines which are better able to carry the additional workload. The newer machines have integrated diagnostic hardware/software that is included in the purchase and was not available at the time the

older machines were deployed. This diagnostic software provides for automated monitoring and alerting allowing technical staff to be notified when components begin to report errors, prior to complete failure. Older machines are experiencing intermittent/transient failures that are not immediately attributable to specific hardware malfunctions. The newer higher performance infrastructure servers will provide METRONET with a more stable, scalable and reliable environment.